



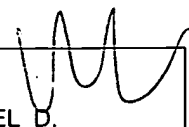
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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/617,990 | 07/11/2003 | Michael D. Gandrud | P06591US0 | 4246 |
| 34082 | 7590 | 11/09/2004 | EXAMINER | |
| ZARLEY LAW FIRM P.L.C. CAPITAL SQUARE 400 LOCUST, SUITE 200 DES MOINES, IA 50309-2350 | | | LOPEZ, FRANK D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3745 | |

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/617,990 | Applicant(s) GANDRUD, MICHAEL D.  | |
| | Examiner F. Daniel Lopez | Art Unit 3745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/11/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/21/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control system controlling the proportional control valve based on pressure in the system lines and other parameters must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 1-12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 and 7 line 5-6 "said hydraulic motor fluidly connected to the first and second system pressure lines" is confusing, since this limitation is claimed in lines 3-4 for each respective claim.

In claim 1 line 11 "control valves" is confusing, since previously only one "control valve" (line 7) is claimed.

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In claim 7 line 8 "electrically proportional control valve" should be -- electrically proportional flow control valve--, to agree with line 12 and dependent claims. In claim 7 line 12-14 "to open the...valve in a pressure line is below a threshold pressure" is an incomplete phrase.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 7 -12 are rejected under 35 U.S.C. § 103 as being unpatentable over Gollner in view of Applicant's admitted prior art. Gollner discloses a loop flushing circuit comprising a hydraulic motor (15) fluidly connected by first and second lines (A, B) to a variable displacement pump (12); a shuttle valve (16) fluidly connected to the motor and to an electrical flow control valve (21); a control means (1) operably connected to the control valve, to open the control valve when pressure in both of the lines is below a threshold pressure (e.g. column 5 line 1-3), in addition to other parameters (e.g. column 4 line 35-50) detected by the control means; wherein the control means is an electrical valve actuator and the control valve is controlled by modulating switch on and switch-off time (e.g. column 5 line 13-16); but does not disclose that the electrical flow control valve is a proportional spool or poppet valve.

Official notice is taken, for an electrical flow control valve, which is controlled by modulating switch on and switch-off time; that the valve can be a proportional spool or poppet valve. It would have been obvious at the time the invention was made to one having ordinary skill in the art to use a proportional spool or poppet valve for the control valve of Gollner, as a matter of engineering expediency.

Claims 1-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Meier in view of Gollner. Meier discloses a loop flushing circuit comprising a hydraulic motor (26A) fluidly connected by first and second lines (including AA, BB, respectively) to a variable displacement pump (14); an electrical flow control valve (52) fluidly connected to one of the lines; a control means (22A) operably connected to the control valve, to open the control valve when pressure in the one line is low pressure side of the loop (e.g. column 4 line 29-62), in addition to other parameters (e.g. column 5 line 10-13) detected by the control means; wherein the control means is an electrical valve actuator; but does not disclose that the electrical flow control valve is a proportional spool or poppet valve.

Gollner teaches, for a loop flushing circuit comprising a hydraulic motor (15) fluidly connected by first and second lines (A, B) to a variable displacement pump (12); an electrical flow control valve (21) fluidly connected to one of the lines (by a shuttle valve 16); a control means (1) operably connected to the control valve, to open the control valve based on a plurality of parameters (e.g. column 4 line 35-50) detected by the control means; wherein the control means is an electrical valve actuator; that the control valve is controlled by modulating switch on-and switch-off

Official notice is taken, for an electrical flow control valve, which is controlled by modulating switch on and switch-off time; that the valve can be a proportional spool or poppet valve.

Since Meier discloses a control valve which controls a flushing of closed loop, since Gollner teaches modulating a control valve which controls a flushing of closed loop, and since proportional spool and poppet valves are well known to be used as modulating valves; it It would have been obvious at the time the invention was made to

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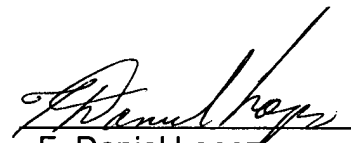
one having ordinary skill in the art to use a proportional spool or poppet valve for the control valve of Meier, as taught by Gollner, for the purpose of controlling the amount of fluid flushed from the closed loop.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

I will be moving in November 2004, to the New PTO campus. When I move, my new phone number will be 571- 272-4821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
November 5, 2004